WHAT IS CLAIMED IS:

1. (Previously amended). A coaxial spindle cutting saw for dicing wafers and singulating substrates, comprising:

a spindle housing for mounting on a cutting saw,

a coaxial spindle mounted in said spindle housing for movement therewith,

said coaxial spindle comprising a center spindle having first mounting means for positioning a first cutting saw blade mounted on said center spindle,

said coaxial spindle further comprising an outer hollow spindle mounted on said center spindle for rotation therewith and for axial movement relative thereto,

second mounting means for positioning a second cutting saw blade on said outer hollow spindle,

a spindle drive motor coupled to said spindles for rotating both said center spindle and said outer hollow spindle together at the same rotational speed,

spindle positioning means coupled to one of said spindles for accurately positioning one of said cutting saw blades relative to the outer cutting saw blade, and

whereby, said first cutting saw blade and said second cutting saw blade comprise two dicing saw blades for simultaneously dicing said wafer.

2. (Previously amended). A coaxial spindle cutting saw as set forth in claim 1 which further includes a second spindle housing mounted on said same cutting saw; and

four spindles in said two spindle housings for mounting four cutting saw blades for simultaneous cutting operations.

3. (Original). A coaxial spindle cutting saw as set forth in claim 2 wherein said spindle housings are

mounted with their spindle axes mounted side-by-side and independently moveable in Y and Z axes.

4. (Original). A coaxial spindle cutting saw as set forth in claim 2 wherein said spindle housings are mounted end-to-end in substantially the same axis and independently moveable in Y and Z axes.

5. (Original). A coaxial spindle cutting saw as set forth in claim 1 wherein said outer hollow spindle further includes an air bearing surface between an inner diameter of the outer hollow spindle and an outer diameter of the center spindle.

6. (Original). A coaxial spindle cutting saw as set forth in claim 5 wherein said outer hollow spindle further includes an air-bearing surface on the outer diameter of said outer hollow spindle.

7. (Previously amended). A coaxial spindle cutting saw as set forth in claim 6 wherein said spindle positioning means further includes a voice coil actuating means mounted on said spindle housing for positioning said outer spindle relative to said center spindle.

8. (Previously amended). A coaxial spindle cutting saw as set forth in claim 6 wherein said voice coil actuating means further includes a moveable actuating arm slideable relative to said spindle housing, and

an air-bearing coupling mounted on said actuating arm for movement of said outer hollow spindle.

9. A coaxial spindle cutting saw as set forth in claim 6 wherein said spindle positioning means further includes a moveable actuating arm mounted on said spindle housing, and

coupling means mounted on said actuating arm for movement of said outer hollow spindle.

10. (Original). A coaxial spindle cutting saw as set forth in claim 1 wherein said spindle drive motor is directly coupled to one of said coaxial spindles.

11. (Original). A coaxial spindle cutting saw as set forth in claim 1 wherein said spindle drive motor is mounted in or on said spindle housing.

12. (Withdrawn)

13. (Withdrawn)

14. (Withdrawn)

15. (Withdrawn)

16. (Withdrawn)

17. (Withdrawn)

18. (Withdrawn)

19. (Withdrawn)